

ANNUAL REPORT OF INSECT CONDITIONS  
IN WEST VIRGINIA

TO

THE UNITED STATES FOREST SERVICE, DELAWARE, OHIO

1978

Gypsy Moth

There were 122 male moths caught in 105 traps this year in West Virginia. Of this total, 67 moths were caught in Jefferson County, 45 male moths in Berkeley County, 8 male moths in Morgan County, 1 in Pendleton County, and 1 in Hampshire County.

An infestation has been found in Loudin County, Virginia, about 500 feet from the Jefferson County line. A total of 31 larvae were collected and two 1977 egg masses were found. Scouting for 1978 egg masses has not been completed. The larvae and eggs were found after an extensive burlap banding of oaks on the Appalachian Trail, conducted by the West Virginia Department of Agriculture.

Approximately 21,000 acres will be sprayed in April-May 1979 in cooperation with APHIS, West Virginia Department of Agriculture, and the Virginia Department of Agriculture and Commerce.

The trapping results indicate there may be at least 2 to 3 infestations in West Virginia that have not been found.

Fall Cankerworm

Populations of this insect continue at a very low level in Grant and Jefferson Counties. Sticky trap bands and egg mass surveys will continue to be conducted to monitor the insect.

### Oak Leaf-tier Complex

This tier complex continues to plague the red oaks in Pocahontas and Greenbrier Counties. The infestation was not heavy this year but light to moderate damage was recorded over 100,000 acres.

### Forest Tent Caterpillar

The only area where caterpillars were found in large numbers was in the area of Jefferson County where the burlap bands were placed to catch Gypsy moths. Light damage was noted on approximately 1,000 acres.

### Eastern Tent Caterpillar

Populations of this insect are starting to increase throughout West Virginia. The insect had been at very low levels the past few years but now seems to be on the upswing. As many as 50 nests were observed in single cherry trees this year. The insect will probably peak next year and continue at high levels for a few years.

### Scarlet Oak Sawfly - *Caliroa quercuscoccineae*

The Scarlet Oak Sawfly continues to be a problem in southern West Virginia where it defoliated over 100,000 acres of red oaks. Aerial flights were conducted to obtain this acreage. It is expected the insect will not be a problem next year since the populations collapsed in Virginia and Kentucky in 1978. However, the area will be monitored to check for population trends.

### Fall Webworm - *Hyphantria cunea*

The insect has not been causing as much damage this year as in the past few years in West Virginia. We do not anticipate any large buildups for the next few years. The insect can, however, probably be found in every county of the state where occasional trees are affected.

### Locust Leaf Miner - *Zenochalepus dorsalis*

The leaf miner caused heavy damage to black locust in West Virginia during 1978. It was reported last year that many trees re-foliated in late August due to heavy rains and would be hard pressed to leaf out this spring. Some of the locust trees leafed out this spring but many others died, probably from the stress of putting out 2 sets of leaves in one year so late in the season.

### Walking Sticks

The walking sticks continue to cause complete defoliation to black locust and oaks in Mineral County. Approximately 1200 acres are heavily infested at this writing. The insect is increasing and defoliation will probably be more widespread next year.

### Nantucket Pine Tip Moth

The insect continues to cause problems in Scotch pine plantations in western West Virginia.

### Periodical Cicada

Brood I of the periodical cicada hatched this year in Pendleton, Grant, and Hardy Counties. Damage to the trees was very heavy.

## ANNUAL REPORT OF DISEASE CONDITIONS

### Dutch Elm Disease - Ceratocystis ulmi

Dutch elm disease has been reported in most every county of the State. Over the past few years there seems to have been a rapid increase in disease incidence. The most serious problems with this disease appears along the state's major river drainages. We anticipate that disease incidence will increase over the next few years. We have no active control program for Dutch Elm disease. However, we try to disseminate information to the public and make our assistance available should persons or municipalities decide to begin a control program.

### Oak Wilt - Ceratocystis fagacearum

The West Virginia Department of Agriculture, Oak Wilt Survey and Control Program was discontinued after the 1977 season. The disease occurred statewide but was most serious in the eastern panhandle and southern portions of the state. A spotter did fly several quadrangles in the eastern panhandle and reported low disease incidences this year. Last year disease incidence was very high with nearly 3,000 trees tagged and treated. We anticipate annual fluctuations in disease incidence with no drastic increases over time.

### Sycamore Anthracnose - Gnomonia platani

During the spring of 1978 climatic conditions were perfect for sycamore anthracnose. Sycamore trees throughout the state suffered extremely heavy damage. Many trees remained 60% - 70% defoliated through August, 1978. We anticipate some mortality but it should be very low. In previous years sycamore anthracnose incidence had been light.

Hardwood Anthracnose Disease - other than on Sycamore-Gnomonia sp.

Anthracnose disease has been reported causing premature defoliation on buckeye, hickory and walnut trees. Apparently the cool moist spring we experienced was conducive to infection and disease development.

Lophodermium needlecast - Lophodermium pinastri

Lophodermium needlecast was reported causing damage in a number of Scotch pine plantations in the state. The moist fall weather conditions we experienced in 1977 was conducive to infection and disease development. Incidence varies from year to year according to the weather conditions.

Maple decline

Maple decline continues to be a problem in urban plantings. Maple decline may become more of a problem if winters continue to be severe. This is due to the heavy use of salt during these periods.

Ice damage

March 25, 1978, a severe ice storm hit the Appalachian mountains in West Virginia causing extensive damage to 25,000 acres of timber. Most of the damage was concentrated on the northern and eastern mountain slopes at elevations above 3,000 feet. Total volume of destroyed timber is unknown but approximately 25 million board feet of salvageable timber are located in the Monongahela National Forest.

White Pine Root Decline - Verticicladiella procera

Each year we confirm the presence of the white pine root decline organism in more and more plantings. To date we have found this disease in 14 West Virginia counties, scattered throughout the state.

Most plantation owners estimate they lose 2-3% of the total number of trees in a stand to this disease each year. Survey work will continue to determine the full impact of this disease to the West Virginia Christmas tree and reforestation plantings.